

Patent Claims

1. Device for machining of components, namely rotary machining of rotationally symmetrical components on radially interior machining surfaces (16) of a component (10), having a drill rod (23) extending essentially axially and a tool mount (24) extending essentially radially, holding a lathe tool (27), characterized in that the drill rod (23) has a projection (25) which extends essentially radially and can be coupled to the tool mount (24) which extends essentially radially, whereby the radial dimensions of the projection (25) on the drill rod (23) and on the tool mount (24) are adapted to the dimensions of a hub bore (26) of the component (10) to be machined such that the drill rod (23) and the tool mount (24) in the uncoupled state can be inserted into the hub bore (26), and in the coupled state, the lathe tool (27) mounted in the tool mount (24) can be brought into abutment with the radially interior machining surfaces (16) of said component (10).
2. Device according to Claim 1, characterized in that the lathe tool (27) is mounted in the tool mount (24) via a lathe tool holder (28), whereby the lathe tool holder (28) is designed to be pivotable with respect to the tool mount (24).
3. Device according to Claim 2, characterized in that the lathe tool (27), together with a lathe tool holder (28), can be pivoted with respect to the tool mount (24).
4. Device according to Claim 3, characterized in that the lathe tool (27), together with the lathe tool holder (28), can be pivoted with respect to the tool mount (24) in a mainly axial direction.
5. Device according to one or more of Claims 2 through 4, characterized in that a drive shaft (32) is guided in the drill rod (23), whereby the lathe tool holder (28) is pivotable via the drive shaft (32) with respect to the tool mount (24).

6. Device according to Claim 5,
characterized in that
the drive shaft (32) is connected via a gear (33) to the lathe tool holder (28), whereby
the gear (33) converts the driving movement of the drive shaft (32) into a pivoting
movement of the lathe tool holder (28).
7. Device according to Claim 6,
characterized in that
the gear (33) is formed by at least one gearwheel (34, 35, 37) extending in projection
(25) of the drill rod (23) and by a worm gear (36) extending in the tool mount (24)
and having a gearwheel (51) allocated to it.
8. Device according to Claim 7,
characterized in that
several gearwheels (34, 35, 37) are located in the projection (25) on the drill rod (23),
a first gearwheel (34) being coupled to the drive shaft (32) and a second gearwheel
(35) being coupled to the gearwheel (51) allocated to the worm gear shaft (36).
9. Device according to Claim 7 or 8,
characterized in that
the worm gear shaft (36) acts on the lathe tool holder (28), whereby the lathe tool
holder (28) is designed as a segment of a worm gear.
10. Device according to one or more of Claims 1 through 9,
characterized in that
lines (46) are integrated into the drill rod (23) and into the tool mount (24), said lines
carrying a coolant and/or a lubricant in the direction of the lathe tool (27).